Draft 2012 Basin Highlights Report & State of the State o





Red and Canadian River Basins Vicinity Map





Surface Water Quality

The Federal Clean Water Act – Sections 305(b) & 303(d)

The Environmental Protection Agency (EPA)

The State of Texas

Texas Commission on Environmental Quality (TCEQ)

The Texas Water Quality Integrated Report For Clean Water Act Sections 305(b) and 303(d)

Surface Water Quality Monitoring Team (SWQM)
Continuous Water Quality Monitoring Team (CWQM)
Total Maximum Daily Load Team (TMDL)
Clean Rivers Program Partners (CRP)
The Red River Authority of Texas

Data and Information Used in the Basin Highlights Report

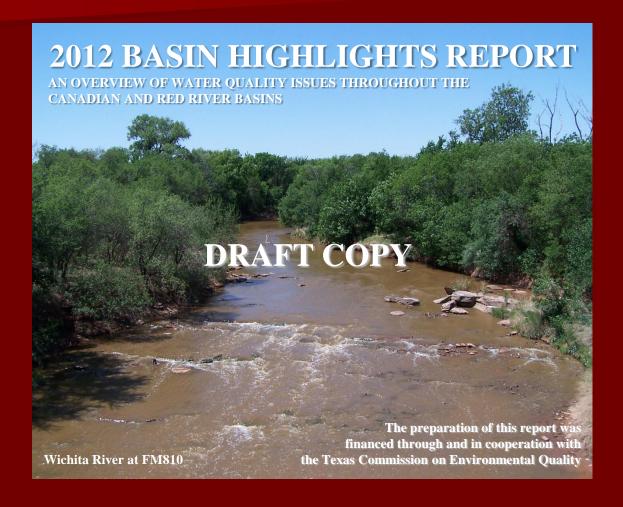
The Stakeholder

Red River Authority of Texas

Texas Commission on Environmental Quality (TCEQ)

United States Geological Survey (USGS)

Water Quality in the Red River Basin





Water Quality Parameters Requiring Attention

Dissolved Salts

Aquatic Health

Total Dissolved Solids

Low Dissolved Oxygen

Chlorides

Nutrient Enrichment

Human/Wildlife Health

Ammonia

Bacteria – E. coli

Chlorophyll a

Nitrates

Total Phosphorous

Ortho-Phosphorous

Weather?
Drought, Drought & Drought

U.S. Drought Monitor

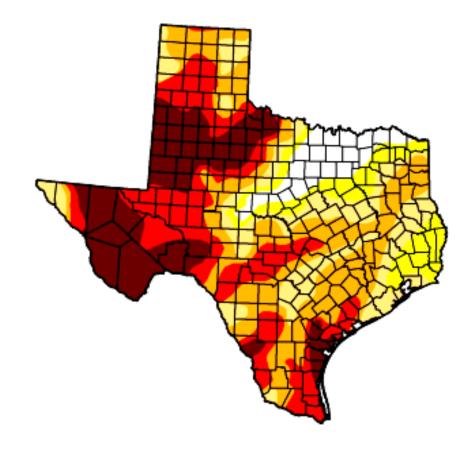
March 13, 2012

Valid 7 a.m. EST

Texas

Drought Conditions (Percent Area)

	proof to an area in a contractory					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	6.98	93.02	84.50	67.10	41.62	20.54
Last Week (03/06/2012 map)	6.05	93.95	86.56	70.98	41.98	20.64
3 Months Ago (12/13/2011 map)	0.00	100.00	99.83	90.20	76.41	41.29
Start of Calendar Year (12/27/2011 map)	0.01	99.99	97.83	84.81	67.32	32.36
Start of Water Year (09/27/2011 map)	0.00	100.00	100.00	99.16	96.65	85.75
One Year Ago (03/08/2011 map)	8.31	91.69	77.99	53.64	14.16	0.00



Intensity:



The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.







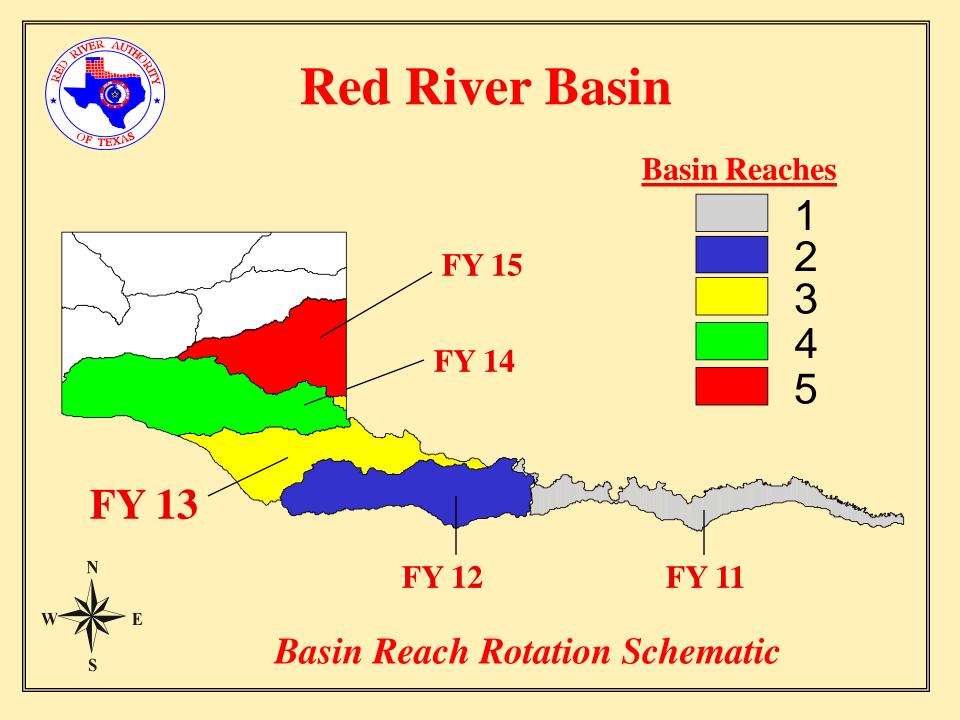


http://droughtmonitor.unl.edu

Released Thursday, March 15, 2012 Michael Brewer, National Climatic Data Center, NOAA

Water Quality Monitoring in the Red River Basin

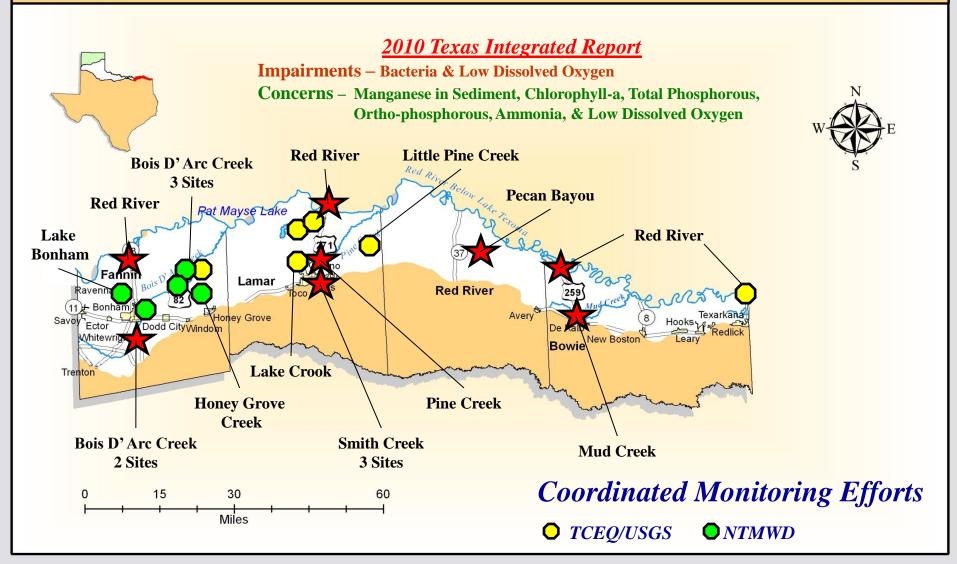
ENTITY	FY11	FY12
RRA	33	52
TCEQ	20	19
USGS	30	34
City of Sherman	7	7
North Texas MWD	NA	8
Total Stations Monitored	90	120





Red River Basin Lower Reach I















Red River Basin Upper Reach I



2010 Texas Integrated Report Impairments – Bacteria Concerns - Chlorophyll a, Ortho-phosphorous, Total Phosphorus, Ammonia, & Nitrate Red River Lake Texoma Lake Nocona **Red River** Lake Texoma **Red River Iron Ore Creek** 175 287 **City of Sherman Sites** Cooke Clay Post Oak Creek 3 Sites **Montague Choctaw Creek 3 Sites** Grayson Sand Creek **Big Mineral Creek** Coordinated Monitoring Efforts 12.5 50 Miles O TCEQ/USGS **○** *NTMWD* \bigcirc COS



Lake Texoma @ Denison Dam







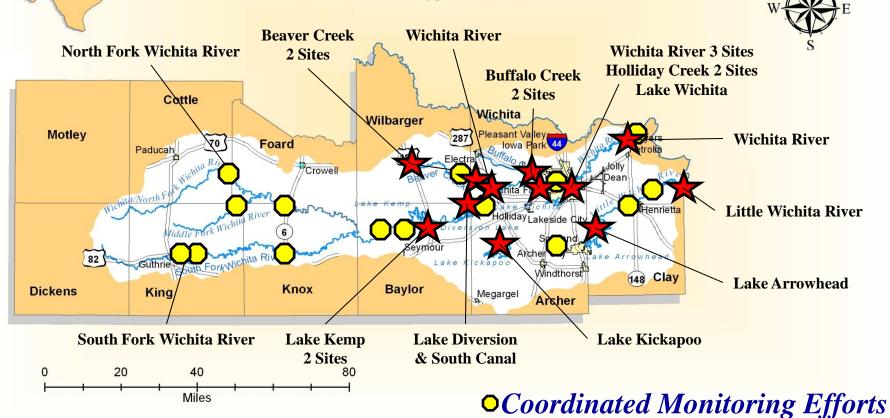
Red River Basin Reach II



2010 Texas Integrated Report

Impairments – Low Dissolved Oxygen, Sulfate, TDS, Bacteria, & Chloride

Concerns – Chlorophyll a, Total Phosphorous, Ortho-phosphorous, Nitrate, Ammonia, Bacteria, Low Dissolved Oxygen, & Selenium







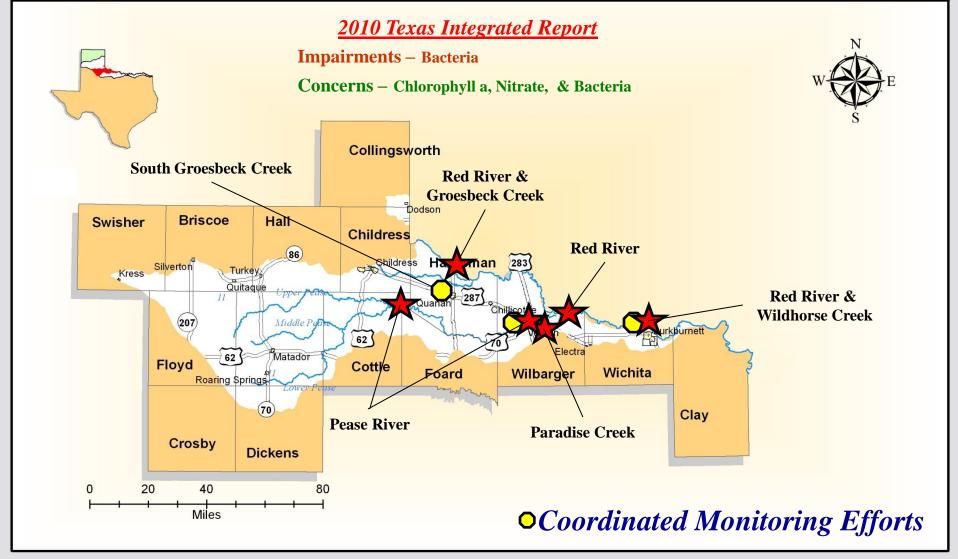






Red River Basin Reach III













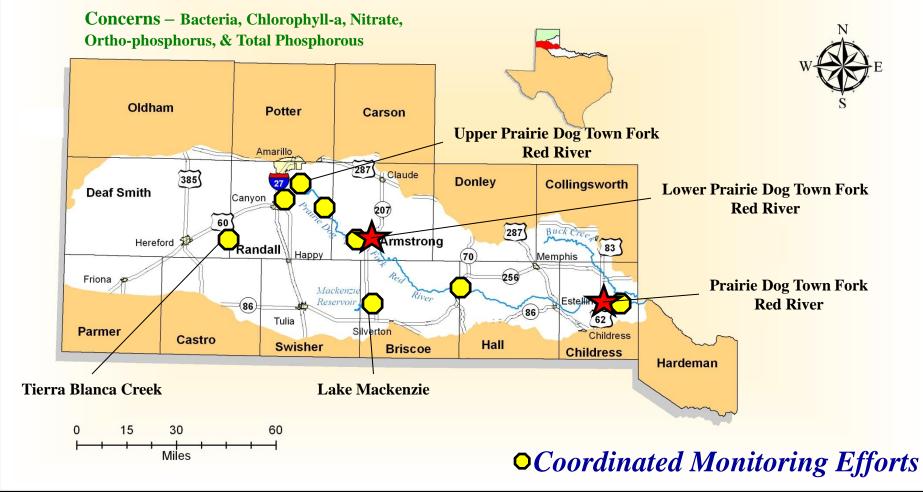


Red River Basin Reach IV



2010 Texas Integrated Report

Impairments – Bacteria & pH





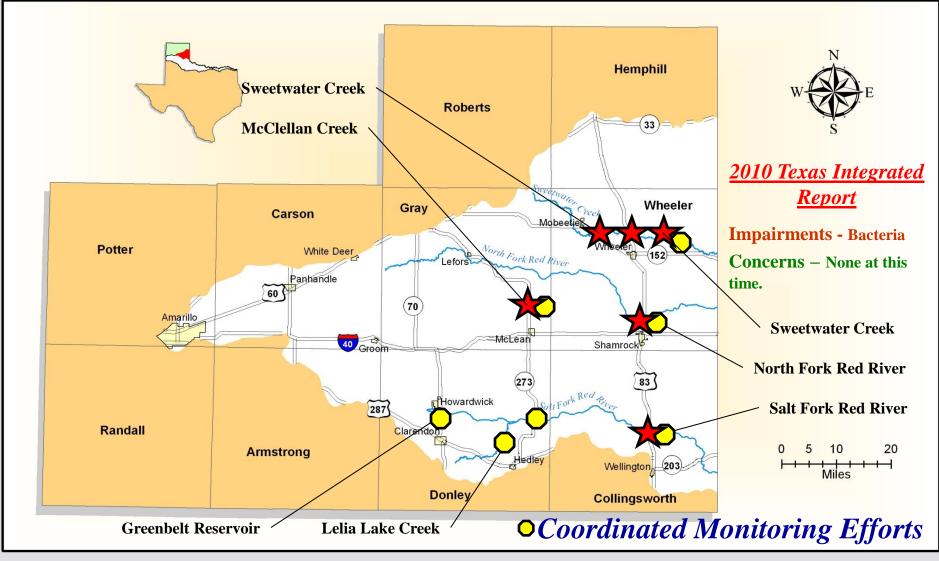






Red River Basin Reach V













The Future of Water Quality Monitoring

Watershed Action Planning Process

Management Tool - To coordinate the planning, facilitation, and tracking of actions to address water quality issues.

<u>Numerous Agencies</u> – TCEQ Water Programs, River Authorities, CRP Partners, TSSWCB, and other interested entities.

Local Watershed Discussions

Characterize the Watershed – Who knows what!

<u>Identify</u> – Research, funding capabilities, and potential stakeholders.

<u>Recommendations</u> – What needs to be done!

QUESTIONS OR COMMENTS



www.rra.dst.tx.us